SECTION – B
SHORT QUESTION

Q – 2 If A = {1, 2, 3, 4}, B = {2, 4, 5, 6} and C = {2, 3, 6, 8}, find $(A \Delta B) \times (B \cap C)$

Q – 3 If a – b and a + b = -9, find the valeu of $a^2 + b^2$.

Q – 4 Find the solution set of any one fo the following equation.
(i) $2x(4x - 1) = 15$ (ii) $-6 + |5x - 3| = 3$

Q – 5 Write the advantages and disadvantages of Arithmetic Mean.

Q – 6 Simplify.

(i) $\left(\dfrac{-30x^{10}y^{8}}{-5x^{3}y^{2}}\right)^{2}$ (ii) $\dfrac{n\sqrt{q}}{m\sqrt{q}}$

Q – 7 Prove that : $\tan\theta + \cot\theta = \sec\theta \operatorname{cosec}\theta$

Q – 8 Simplfy with the help of logarithm.

$$\frac{(780.6)^{1/2} \times \sqrt{3000}}{4.000}$$

Q – 9 Eliminate " x " from the equation: $3x + 4y = 22$, $-4x + 5y = 43$

Q – 10: Simplify: $\dfrac{x^2(y-z)}{(x+y)(x+z)} + \dfrac{y^2(z-x)}{(y+z)(y+x)} + \dfrac{z^2(x-y)}{(z+x)(z+y)}$

Q – 11 Solve: $\dfrac{\sqrt{x+10} - \sqrt{x-10}}{\sqrt{x+10} + \sqrt{x-10}} = \dfrac{1}{5}$

Q – 12 Prove that, if two lines intersect, the vertically opposite angles so formed are congruent.

Q – 13 Prove that, if the line drawn from the centre of a circle to bisect a chord is perpendicular to the chord.

Q – 14 Prove that, the sum of the measures of angles of a quadrilateral is 360°.

Q – 15 Define any TWO of the following terms and draw the figures.
Acute angle – Corresponding angles – Escribed circle of a triangle